

CLAIMS

1. A raiser seat for assisting a person from a sitting to a standing position comprising:
a seat frame;
a seat adapted for movement relative to the seat frame between a lowered position
5 and a raised position; and
a movement mechanism for moving the seat between the lowered and the raised positions;
wherein the movement mechanism comprises at least one cam and wherein the seat rests on the at least one cam such that rotation of the at least one cam results in movement
10 of the seat relative to the seat frame.
2. A raiser seat according to claim 1, wherein the seat is supported by a seat unit.
3. A raiser seat according to claim 2, wherein the seat unit is removably attached to the seat frame.
4. A raiser seat according to claim 2 or 3, wherein the at least one cam is retained
15 within the seat unit.
5. A raiser seat according to any one of claims 2 to 4, wherein the at least one cam is rotatably fixed to the seat unit.
6. A raiser seat according to any one of the preceding claims, wherein the seat and/or the seat unit is mounted on the seat frame by sliders.

7. A raiser seat according to any one of the preceding claims,, wherein the movement mechanism comprises a pair of coaxial cams.

8. A raiser seat according to any one of the preceding claims, wherein the movement mechanism comprises a first pair of coaxial cams supporting a rear end of the seat and a
5 second pair of coaxial cams supporting a front end of the seat.

9. A raiser seat according to any one of the preceding claims, further comprising a motor for rotating the at least one cam.

10. A raiser seat according to any one of the preceding claims, wherein the at least one cam is attached to a coaxial gear in meshed engagement with a rack such that translation of
10 the rack results in rotation of the at least one cam.

11. A raiser seat according to claim 10, wherein the rack is driven by a gear powered by a motor.

12. A raiser seat according to any one of the preceding claims, wherein the profile of the at least one cam is chosen dependent upon the path followed by the seat as it moves
15 between the first and the second position.

13. A raiser seat according to any one of the preceding claims, wherein the movement mechanism further comprises at least one actuator fixed at a first end to the seat.

14. A raiser seat according to claim 13, wherein the at least one actuator comprises at least one threaded member in meshed engagement with at least one gear driven by a motor.

15. A raiser seat according to any one of the preceding claims, wherein the seat frame is mounted on wheels, and the raiser seat further comprises a brake system.

16. A raiser seat according to claim 15, wherein brake system is associated with the movement mechanism, such that operation of the movement mechanism causes the brake system to act to prevent rotation of the wheels.

17. A raiser seat according to any one of the preceding claims, wherein the at least one cam either incorporates a friction reducing coating or is manufactured at least partially from a friction reducing material.

18. A raiser seat according to any one of the preceding claims, wherein the at least one cam is linked to the seat in way which does not significantly alter the load on the movement mechanism.

19. A raiser seat according to claim 18, further comprising a fixed connecting member extending from the at least one cam.

20. A raiser seat according to claim 19, wherein the connecting member is an extension of roller shafts of the at least one cam.

21. A raiser seat according to claim 19 or 20, wherein the seat comprises a guide track adapted to receive the connecting member.

22. A raiser seat according to claim 18, wherein at least one single or double action pneumatic or hydraulic cylinder connects the at least one cam and the seat.

23. A raiser seat according to any one of the preceding claims, wherein the at least one cam comprises at least one of the following features:

an integral gear;

an integral shaft;

5 an integral bearing;

an integral bearing surface;

an integral roller;

a one roller assembly;

at least one connection member;

10 a roller carriage;

an integrated roller carriage in whole or in part

an integral roller track;

an integral seal;

integral sealing surfaces or sealing area;

15 an at least one integral location and retention component;

a blade;

a shaft recess;

a bearing recess;

a protrusion recess;

20 an externally threaded member;

an internally threaded member;

one hole;

one roller type or plain bearing/bush;

one press fit member;

25 one threaded member;

one taper edge profile;

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one alternative edge profile;

one increased thickness section that can run the full length of the cam; and

multiple blades

5 24. A raiser seat according to any one of the preceding claims, wherein the seat frame comprises handles.

25. A raiser seat according to any one of the preceding claims, wherein the seat frame comprises footrests.

10 26. A raiser seat substantially as hereinbefore described with reference to the accompanying drawings.